

IN THE SPECIFICATION:

Please amend the paragraph beginning at page 1, line 22 and ending at page 2, line 5, as follows.

--Fig. 11 of the accompanying drawings shows a cross section of a conventional roller type fixing apparatus. In Fig. 11, the reference numeral 101 designates a fixing roller, and the reference numeral 102 denotes a pressure roller. These rollers are rotatively driven at a predetermined peripheral speed in the directions of arrows. These two rollers 101 and 102 are brought into pressure contact with each other with a predetermined pressure force, whereby there is formed a fixing nip part N for nipping and conveying a recording material 109 on which there is unfixed toner t.--

Please amend the paragraph beginning at page 8, line 21 and ending at page 9, line 12, as follows.

--The individual units will hereinafter be described in greater detail. The image forming portion 10 is of a construction as will be described below. Photosensitive drums 11a, 11b, 11c and 11d as image bearing members are journaled at their centers and are rotatively driven in the directions of respective arrows. In opposed relationship with the outer peripheral surfaces of the photosensitive drums 11a-11d and in the directions of rotation thereof, there are disposed primary electrifiers 12a, 12b, 12c and 12d as electrifying members for electrifying the photosensitive drums to predetermined potential, optical systems 13a, 13b, 13c and 13d reflecting off mirrors 16a-16d for forming electrostatic latent images on the photosensitive drums 11a-11d, and developing apparatuses 14a, 14b, 14c and 14d for forming toner images on the

photosensitive drums. By the primary electrifiers 12a to 12d, charges of a uniform charging amount are given to the surfaces of the photosensitive drums 11a to 11d.--

Please amend the paragraph beginning at page 14, line 3 and ending at line 20, as follows.

--Thereafter, the recording material 410 comes into the secondary transferring area Te and contacts with the intermediate transferring belt 31, whereupon in timed relationship with the passage of the recording material 410, a high voltage is applied to the secondary transferring roller 36. The toner images of four colors formed on the intermediate transferring belt by the aforescribed process are then transferred to the surface of the recording material 410. Thereafter, the recording material 410 is accurately guided to the fixing roller nip part by a conveying guide 43. The toner images are fixed on the recording material by the heat and pressure of the pair of fixing rollers 401 and 402 ~~41A and 41B~~. Thereafter, the recording material is conveyed by the inner and outer sheet discharging rollers 44 and 45 and is discharged onto a sheet discharging tray 48 outside the image forming apparatus.--

Please amend the paragraph beginning at page 22, line 5 and ending at line 22, as follows.

--Fig. 6 is a table representing the relation between the state of the image forming apparatus and the set value of Tref. The reference numeral 901 indicates the control temperature during warmup which is a preparing operation for an image forming capable state in which the image forming apparatus 40 is warming up. The reference numeral 902 indicates the

control temperature when print has been started. The reference numeral 903 ~~904~~ indicates the control temperature when print has been finished, and it is equal to the starting temperature during warmup. Also, reference numeral 904 indicates that in a state in which the image forming apparatus need be emergently stopped due to paper jam or the like, the control temperature is set at 0°C to thereby control the heater so as not to be switched on. Also, the CPU 601 effects the control of rotating the fixing roller 401 and the pressure roller 402.--

Please amend the paragraph beginning at page 25, line 12 and ending at page 26, line 13, as follows.

--Fig. 9 mentioned previously shows an idle rotation time Tidlerot determination routine. At 1101, whether the warmup time Tprerot is longer than a threshold value of 2 minutes 30 seconds stored in warmup time threshold value data 706 (Fig. 4) described in the present embodiment is judged (1101). If it is longer (1102), the amount of accumulated heat in the mandrels 403 and 404 is judged to be small, and a set value of 5 minutes taken out of data 705 (idle rotation time table) is set to Tidlerot. If it is shorter (1103), a set value of 1 minute likewise taken out of the data 705 is set to Tidlerot. Regarding the temperature control of the fixing roller during this idle rotation, taking into consideration the proper fixing property when the image forming signal is inputted during the idle rotation, it is preferable to be controlled at the set temperature in the standby state. As described above, in the present embodiment, if the warmup time is long, the pressure roller before the start of the warmup is considered to be cold and the pressure roller cannot be sufficiently warmed within this warmup time and therefore, the idle rotation time after the shift to the standby state is set to a long time. On the other hand,

when the warmup time is short, the pressure roller is considered to be warm from before the start of the warmup, and the idle rotation time is set to a short time in order to eliminate any useless idle rotation.--

Please amend the paragraph beginning at page 30, line 17 and ending at page 31, line 26, as follows.

--In the present embodiment, design is made such that the fixing roller 2001 is rotatively driven by a driving mechanism, and with the rotative driving of this fixing roller 2001, the pressure roller 2002 is driven to rotate by a frictional force in the fixing nip part N. The reference numeral 2014 designates an induction coil assembly inserted and disposed in the internal space of the fixing roller 2001, and it comprises an induction coil 2003 as a coil, a coil holder 2005 as a supporting member for supporting the coil, a core (magnetic core) 2007, a stay 2006, etc. The coil holder 2005 is a pail-shaped member of a substantially semicircular cross-sectional shape formed of heat-resistant resin such as PPS, PEEK or phenol resin, and a lead wire is wound around this coil holder 2005 to thereby provide the induction coil 2003. The core 2007 is assembled inside the coil holder 2005 so as to have a T-shaped cross section. These are integrated as an induction coil assembly. This induction coil assembly 2014 is inserted into the internal space of the fixing roller 2001 and with the induction coil 2003 3 outside the coil holder 2005 facing down and brought close to the inner surface of the fixing roller 2001, the opposite end portions of the stay 2006 are fixedly supported between the fixing unit frames, not shown, whereby the induction coil assembly 2014 is disposed in the internal space of the fixing roller 2001. The reference numeral 2004 denotes a temperature sensor such as a contact type

thermistor as a temperature detecting member disposed so as to contact with the surface of the fixing roller 2001, or an infrared ray type non-contact thermistor. The reference numeral 2010 designates a separating pawl disposed in contact with or in proximity to the surface of the fixing roller 2001 at the recording material exit of the fixing nip part N.--

Please amend the paragraph beginning at page 32, line 17 and ending at page 33, line 21, as follows.

--The temperature of this fixing roller 2001 is detected at each preset predetermined sample period by the temperature sensor 2004, and the detected temperature signal is inputted to a CPU. The CPU increases or decreases the electric power supply from the electric power supplying portion to the induction coil 2003 on the basis of the detected temperature signal to thereby automatically control the surface temperature of the fixing roller 2001 at any time so as to be maintained at a predetermined constant temperature (preset target temperature). In a state in which the surface temperature of the fixing roller 2001 is automatically controlled at the predetermined constant temperature, a recording material 401 is fed over guide 2008 into the fixing nip portion N and is nipped and conveyed thereby, whereby an unfixed toner image 2009 is heated and fixed on the recording material 401 by the heat of the fixing roller 2001. To increase the heat generation of the fixing roller, the number of turns of the induction coil can be increased, or a material of high permeability and low residual magnetic flux density such as ferrite or Permalloy can be used as the core, or the frequency of the alternating current can be made high. The induction coil 2003 used in the present embodiment is formed by winding a litz wire comprising twisted 50 to 150 strands by 6 turns. The number of turns can be,

for example, 4 turns to 10 turns. Even such a heating method of generating heat in the fixing roller by an induction heating process can obtain an effect similar to that of the first embodiment by the present invention being applied thereto.--